

THE IBIS.

TENTH SERIES.

VOL. II. No. 3. JULY 1914.

XX.—*Observations on the Bird-Life of the Anatolian Plateau during the Summer of 1907.* By L. N. G. RAMSAY, M.A., B.Sc.

(Text-figure 6.)

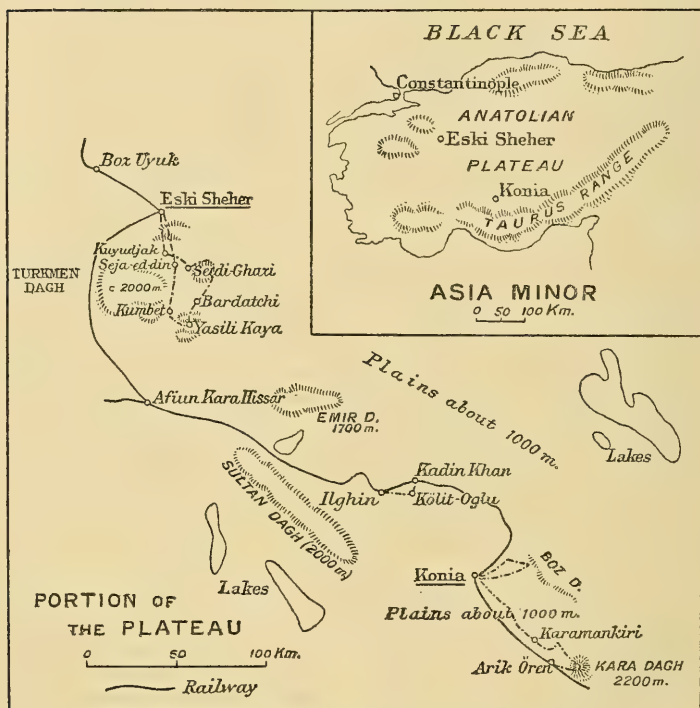
DURING the summer of 1907, it was my good fortune to spend several weeks in the interior of Asia Minor. My attentions were devoted almost entirely to the natural history of the country, a considerable part of my time being spent in the formation of a collection of the smaller Mammalia. It was, however, the bird-life which interested me most, and in this paper are embodied my ornithological observations. Made in a region comparatively little subject to the visits of naturalists, it is hoped that these notes may be of interest to ornithologists. It will be well to begin by giving some account of the districts visited, as typical of the interior of Asia Minor.

A glance at the map (text-fig. 6) will be sufficient to indicate the whereabouts of the places to be mentioned. We left Scutari on the Asiatic side of the Dardanelles on May 18, and arrived the same evening at Eski-Sheher, after fourteen hours in the train. The line at first skirts the Gulf of Ismid, then continues eastward to the river Sakaria, whose valley and that of its tributary the Kara Su it follows through very mountainous country, finally emerging into the great plateau near Boz Uyk.

On the plateau we remained until the 8th of July, and during the intervening period our itinerary was as follows:—

On May 20 another long day in the train brought us to Konia, which city we left on the 23rd to trek to the Kara Dagh, after making a one-day waggon-trip across the plain to the Bos Dagh, a range of hills lying to the north-east.

Text-fig. 6.



Sketch-map of the localities visited by Mr. Ramsay.

In the Kara Dagh we remained in camp for over a month, returning to Konia on June 27.

After this, two short trips by *araba* were made before we returned to Constantinople: the first from Kadin-Khan to Ilghin, *via* Kilit-Oglu (July 1-2), the second a tour into the hilly country south of Eski-Sheher, during which we

covered about 160 km., and passed the villages of Kuyudjak, Seidi-Ghazi, Bardatchi, Yazili-Kaya, Kumbet, and the Sedjaed-Din Teké (July 4-8).

THE ANATOLIAN PLATEAU.

Along the south-eastern margin of Asia Minor rises the lofty arc of the snow-capped Taurus Range. To the north of this the country is a great tableland, stretching away towards Transcaucasia to the east, and descending through mountainous country to the sea on the north and west.

This tableland, the Anatolian Plateau, consists for the most part of wide undulating plains of Mesozoic sediments, of an average elevation of some 3000 feet, from which rise various minor mountain-ranges and groups of hills of volcanic origin, like islands from a sea. In some districts, as in the south-west, ancient metamorphic rocks rise to the surface to form regions of low hills.

The climate in summer is very dry, and the country is therefore arid and for the most part devoid of trees. A number of large sheets of water without outlets lie on the plateau, and besides these several large river-systems (Kizil Irmak, Sakaria, etc.) drain to the north or west.

The winters are severe, with much frost and snow.

With a proper water-supply, such as will be secured to some parts when the irrigation-schemes at present being carried out are completed, the plains would form a very rich and fertile agricultural country, but just now they are for the most part very arid and very thinly populated. Near the towns and villages wheat of fine quality and other crops are grown, but the greater part of the country is open prairie-land covered with a short turf, or sparsely clothed with herbaceous plants, which grow in tufts so as to form widely *open* associations.

The streams are few and sluggish, ending, it may be, in marshes or shallow lakes without outlets. In some of the more marshy areas which the railway passes through between Eski-Sheher and Konia, there were scanty woods of small

deciduous trees, but elsewhere the plains were practically treeless, except for the lofty Lombardy poplars and groves of other trees in and around the towns.

The most characteristic birds of the open plains are Larks of a number of species, which are very numerous. The Isabelline Wheatear (*Saxicola isabellina*) is an equally characteristic and widely dispersed species, while Sand-Grouse (*Pterocles arenarius*), Lapwings (*Vanellus vulgaris*), Rollers (*Coracias garrulus*), and various others are found locally. The Lesser Kestrel (*Falco tinnunculus*) is very common and widely distributed. In and about the towns Swifts (*Cypselus apus*), Kites (*Milvus ictinus*), Storks (*Ciconia alba*), Swallows (*Hirundo rustica*), and Starlings (*Sturnus unicolor*) are common, while Vultures are often to be seen soaring aloft or gorging themselves on some carcase in the plain.

At Eski-Sheher a small river, the Hodja-Su, flows past the outskirts of the town, and here was one of the most interesting assemblages of bird-life. The sluggish river had cut for itself in the alluvial loam, steep banks, often nearly perpendicular for a height of from four to six feet above the water, and in these many Sand-Martins (*Cotile riparia*) had dug their nest-holes. Near by was cultivated ground (market-gardens) with rows of large trees and bushes, in which a good many Magpies (*Pica rustica*) and several pairs of Kites (*Milvus ictinus*) had their nests. On one of the largest trees a colony of about twenty pairs of Herons (*Ardea cinerea*) had established themselves, and the ground below was strewn with their egg-shells. There were also many Lesser Kestrels, especially around one very large tree further along the river.

In the vertical banks of the stream, there were other holes besides those of the Martins, and, on one of these being dug out, a green crab measuring about two and a half inches across the carapace, was found. This, Mr. L. A. Borradaile informs me, was probably one of the freshwater forms of the genera *Potamon* or *Telphusa*.

THE KARA DAGH.

Having given some account of the plains, I will now add some general notes on the Kara Dagh, as an example of the smaller mountain-ranges of the plateau. It should be remembered that in Asia Minor there are many Kara Dags — the name signifies simply “black mountain.” That particular Kara Dagh in which about five weeks of our time were spent lies about fifty miles south-east of Konia, and it was here that most of my collecting and observing was done.

This Kara Dagh, then, is a volcanic mountain-pile rising like an island from the surrounding plains, which are hereabouts at an elevation of some 3300 feet. It is made up of a central mass several miles in diameter surrounded by a number of outlying hills of more or less conical shape. The central mass consists of the rim of a great cup-shaped hollow or crater, in outline a short oval, of which the major axis, some two miles long, runs from south-west to north-east. The bottom of the crater is a grassy basin, at whose lowest point, near the north-east end, lies a small muddy pond, the altitude of which is about 5000 feet. On the south-east side the rim of the crater is formed by a lofty ridge culminating at its more northerly end in Mahalitch Dagh, the highest point of the whole group, 7200 feet above sea-level. Other lofty peaks help to encircle the hollow, but on the side opposite Mahalitch Dagh there is a wide low gap, where the rim rises only three or four hundred feet above the bottom.

At the time of our visit the whole place was practically devoid of water. Only two diminutive springs were found, in addition to the pond in the crater and a larger loch with beds of reeds in a hollow at the base of an outlying hill to the north. Dry water-courses alone bore witness to the floods occasioned by the melting snows in spring, a patch of which lingered on in a sheltered gully on the crater-wall below Mahalitch till the very end of June. In

the surrounding plains, however, at the end of May a good deal of water was still lying—the preceding spring having been marked by an unusually heavy snowfall.

As might have been expected, the vegetation of the Kara Dagh was far from luxuriant. Everywhere were rocks. Most of the lower parts had a scanty soil, sometimes composed of volcanic scoriæ or of gravel washed down by the spates, but everywhere studded with boulders or rock-débris.

The main features of the vegetation were as follows:—

Oak-woods clothed considerable areas of the southern and south-eastern slopes of the central mass. The trees were small, not reaching a greater height than perhaps 25 feet. Ground-vegetation in the woods was scanty. The woods reached an altitude of considerably more than 6000 feet.

Oak-scrub was a distinct type of vegetation, which clothed many of the slopes between 4000 and 6000 feet, sometimes continuously over large areas, sometimes in scattered clumps. The mode of growth of these oaks was always as though they had been coppiced, several stems rising together from the root. A specimen has been identified (with some doubt) as *Quercus lusitanica* Lam.

The rounded bottom of the great crater and some of the higher slopes of the central mass were covered with grass.

The gravel-slopes often supported an open, tufted, herbaceous vegetation; at other parts on the rocky hill-sides, scattered bushes and herbs grew on the scanty soil between the boulders.

In the past, in early Christian times, the Kara Dagh was the site of the town of Barata, situated in a sheltered hollow between some of the outlying hills (Göz D. on the one hand, Kizil D. and Tchét D. on the other). Around this ancient site grew trees and shrubs, such as *Pyrus malus*, *P. salicifolia*, *Prunus kotschyi*, *Elæagnus angustifolia*, *Celtis caucasica*, *Rhamnus oleoides*, *Colutea arborescens*, and others. In one of the high glens, where a spring was situated, there were also a good many deciduous trees, some of large size.

At the time of our visit, the human inhabitants of the Kara Dagh were few, and were living in two small villages of

houses built of baked mud, one situated among the ruins of Barata and known as Maden-Sheher, the other among the ruins of an ancient ecclesiastical settlement near the crater and going by the name of Deilé.

The bird-life of the Kara Dagh was fairly rich and varied, considering the peculiarly extreme nature of the climate—great drought in summer, great cold and much snow in winter. Practically all the information gathered regarding it, along with that from the other localities, will be found in the subjoined annotated list of birds.

An explanatory note with regard to this list is desirable. I had with me the following books: Schmiedeknecht's 'Wirbelthiere Europa's' (1909) and the trusty companion, Howard Saunders' 'Manual of British Birds'; with the help of these and a good field knowledge of our Scottish avifauna, I was able to identify the majority of the species not already known to me. For the rest, shortly after returning home, I consulted the volumes of Dresser's 'Birds of Europe' (1871-1881) and the 'Catalogue of the Birds in the British Museum,' from which it was possible to identify various others. Recently I have consulted Dresser's 'Manual of Palæarctic Birds' (1902-3) and the same author's 'Eggs of the Birds of Europe' (1910), which contains more recent information as to the breeding-range and nesting-habits of all species known to occur in the western Palæarctic area. In the nomenclature of the various species mentioned in the following list, I have adhered strictly to that employed in the last-mentioned work, in the Preface to which the author states that he is "unable to recognise many of the vast number of subspecies which have been and are still being described." For the present purpose, this is all the more convenient, inasmuch as it would be impossible to refer the birds to their subspecies in the absence of hand-specimens. In a few cases I did actually handle dead specimens (for example, *Gyps fulvus*, *Caccabis chukar*, *Columba livia*, *Sitta neumayeri*, and *Pterocles arenarius*), but a wing and foot of the last-named (which I now have) were the only specimens preserved.

The information will be found to refer chiefly to the

avifauna of the Kara Dagh (see introductory section), but any notes from other districts are also included. The list of birds found in the Kara Dagh (marked with a *) numbers thirty-three. Of the remaining twenty-seven, eight which were only seen in the coastal district near Constantinople, are placed in brackets.

Among points of interest may be mentioned the extension of the known breeding-range of *Sturnus unicolor*, notes on the nesting-habits and song of *Melanocorypha bimaculata*, and on the nesting of *Cossypha gutturalis*, hitherto almost unknown.

1. **Turdus merula* L.

Several were seen and heard singing in the woods and hedgerows near Scutari in early May.

In the Kara Dagh, the Blackbird was not uncommon on some of the higher slopes covered with oak trees and scrub. On May 26 one of the men led me to a nest of this species, containing two young birds about four days old. It was built on the broken stump of a small oak tree in the woods near the summit of the highest ridge, at an altitude of perhaps 6800 feet.

2. **Monticola saxatilis* L.

This species frequented the dry rocky mountain-sides which are so abundant in the Kara Dagh. It was less numerous than its congener next to be mentioned. On May 30 I saw a pair of old birds carrying food in their bills, and on June 10 a family of young birds were seen, just able to fly, accompanying their parents, at about 4500 feet.

3. **Monticola cyanus* L.

The Blue Rock-Thrush was not uncommon in the Kara Dagh, frequenting localities similar to those favoured by *M. saxatilis*; I seldom observed it below 4000 feet. The sweet whistling of one of the male birds among the crags on the Göz Dagh † was one of the most beautiful sounds I remember hearing in Nature.

† One of the outlying peaks of the Kara Dagh.

4. **Saxicola isabellina* Rüpp.

Common in the open plains of the plateau. I found a nestful of full-fledged young in a *Citellus*-burrow, about 15 inches from the mouth, in the plains south of Konia on May 23.

In the Kara Dagh some of these Wheatears frequented the wide grassy bottom of the great crater (about 5000 ft.), and my notes also record that "I have seen them at various heights in the mountains" (this probably only refers to the lower parts).

5. *Saxicola oenanthe* L. (?).

Several Wheatears, which I believed to be of this species, were seen on the hill-sides above Scutari on May 9 and 13. There is more doubt about a record of one or two seen near Eski-Sheher on May 19—I think these may have been *S. isabellina*.

6. **Saxicola albicollis* Vieill.

This Wheatear was not uncommon about the slopes of the Kara Dagh.

About the middle of June a family-party was to be seen about the vicinity of our camp during several days. In the first week of the same month a peasant who had caught a hen Wheatear on the nest (which contained three eggs) brought the bird and nest bodily to me. The former escaped before I was able to examine it, but I believe it was of this species. The cock-birds I watched had black sides of the head, wings, and terminal part of tail, the rest pure white, with sometimes a little grey on the white back.

7. **Cossypha gutturalis* Guérin.

Fairly common on the lower slopes of the Kara Dagh in those parts where bushes afforded it sufficient cover to suit its skulking habits.

According to Dresser (1910) the White-throated Chat breeds in Palestine, Asia Minor, Turkestan, and Persia. I found about half-a-dozen nests of this bird. Dresser further

states that he only knows of the nest having been found on two occasions, both near Smyrna, in 1864 and 1905 :—

May 24th. Nest with four eggs (hard-set), about 3700 ft.

„ 25th. „ „ „ „ (fresher), about 3800 ft.

„ 27th. „ „ five eggs (hard-set), about 3900 ft.

„ 29th. „ „ three eggs, one chick.

[May 27th. „ „ four chicks (very young).]

[June 9th. Nest used and empty, 4800 ft.]

The nests were all built in small bushes, isolated or on the borders of thickets. I only saw the female incubating, and she usually sat very close, almost allowing one to touch her before she flew off. Both parents were difficult to observe, as they kept persistently to the shelter of the bushes, and one could seldom obtain more than a glimpse as they flitted from one bush to the other. I have no notes of the construction of the nest. I was not quite certain of the specific identity of the last two nests in the list. The chicks were covered with dark down. One of the eggs which I now have, does not differ from the description given by Dresser.

[8. *Daulias lusciniæ* L.

Fairly common in gardens and groves in Scutari and the neighbourhood. A good many Nightingales were also heard singing among the orchards and groves near the railway-line on our journey to Eski-Sheher on May 18 until the mountainous district of the Sangarius valley was reached.]

[9. *Sylvia cinerea* Lath.

Several were seen in and near Scutari.]

10. *Sylvia hortensis* Bechst.

Several Garden-Warblers were seen at Scutari.

On June 30th I found a nest containing young, “which I am almost certain belonged to this species, as I saw a parent at a few feet away,” at Konia. I was, however, not very well acquainted with this species. Dresser (1910) gives its breeding-ranges as : “Europe . . . south

to the Mediterranean and in Asia east to the valley of the Yenesei."

11. **Sylvia orphea jerdoni* Blyth.

This Warbler was not uncommon in the Kara Dagħ, where I found five of their nests. At the lower levels (about 3800–4000 ft.), where four of the nests were situated, there were fresh eggs and newly-hatched young during the last week of May. In the case of a nest found later on, at 4800 feet, the eggs were not laid till after June 8. The clutches varied from four up to (in one case) six. I brought home several of the eggs, which Mr. W. P. Pycraft, on their being submitted to him, was good enough to identify.

A few Warblers of the genus *Phylloscopus*, also some Tits, were seen at Scutari.

12. **Sitta neumayeri* Michah.

The Rock-Nuthatch was fairly common in the Kara Dagħ, where localities suited to its habits abounded.

I found one of the remarkable nests of this bird on the Göz Dagħ on May 30. It was solidly built of mud or clay, and shaped like a bowl, the top being placed against a vertical rock-face, while the base of the bowl, narrowed and elongated, and projecting horizontally, was pierced by the entrance-hole, an inch or two in diameter. An overhanging ledge sheltered the structure from the rain, while some nine or ten feet of smooth vertical rock protected the Nuthatches' dwelling from terrestrial marauders; but a peasant who was with me succeeded in scrambling up (apparently by his finger- and toe-nails—his feet were bare), and, thus disturbed, five or six young Nuthatches flew out.

During the first half of June a family of these birds, parents and young, gave us great delight by frequenting the camp at Deilé, playing and feeding round the tents in the most unconcerned way.

13. *Motacilla alba* L.

A family of adults and full-grown young White Wagtails was seen beside a pond at Kumbet on the 7th of July.

14. **Lanius minor* Gmel.

Fairly common in the Kara Dagħ, but local, being found chiefly in the low-lying sheltered part near Maden-Sheher, where the warm sun beat down all day. I found six nests in all, five with fresh eggs between May 27 to 29 in the low locality (about 3700 feet), and one in process of construction at 5000 feet on June 21. All were built in small trees at heights varying from five to nine feet (there were no trees much above this height in the localities frequented by the Shrikes). The favourite tree was a species of thorny pear (*Pyrus salicifolia*).

The nests were compact and well made, formed on the outside chiefly of the green shoots and leaves of the tree in which they were built. The full clutch consisted of five eggs. I only saw one insect—a beetle—impaled on a thorn, otherwise one might have imagined they preferred the thorny trees for convenience in this matter.

15. **Lanius collurio* L.

Not uncommon near Scutari.

One or two were also seen at Eski-Sheher, and on May 25 I saw a pair in the Kara Dagħ in the locality frequented by the Lesser Grey Shrikes.

16. **Hirundo rustica* L.

In the Kara Dagħ a few of these Swallows nested on the mud-houses at Maden-Sheher. I also saw them at various other places in the plateau and at Constantinople, but omitted to note these.

[17. *Chelidon urbica* L.

My only note of this is "not very common" (Scutari).]

18. *Cotile riparia* L.

At Eski-Sheher the Hodja-Su, a small sluggish river, has cut for itself steep banks, often nearly perpendicular for a height of four to six feet above the water, in the alluvial loam, and in these I found a good many Sand-Martins nesting on May 19.

19. **Cotile rupestris* Scop.

I met with these Crag-Martins in the Kara Dagħ. A number of them frequented the crags and cliffs on the Göz Dagħ, where they probably bred in the numerous holes and crevices, as some were seen entering these. I endeavoured one day to reach some of the spots, but my pains were unrewarded, except by some very close views of the birds as they wheeled below, so that I was able to see plainly the white spots on the webs of the outspread tail-feathers.

On June 11, however, I found a nest built in a little niche in an overhanging part of a cliff in another part of the Kara Dagħ, near Deilé. Standing underneath I could almost reach this nest, and was able to see that it was built of mud, much like that of a Swallow, and lined with feathers. There was only the one pair of birds in the neighbourhood of this nest.

20. **Carduelis elegans* Steph.

I saw three different pairs of Goldfinches in the Kara Dagħ, all in the higher parts (5000 to 6000 feet). Of two of these pairs the nests were found, the first empty on June 8, the second on June 10 with four rather hard-set eggs. Both were placed in oak bushes, in rough ground covered with clumps of the same.

At Konia on June 29 I saw a pair flying about accompanied by their young, and have also a note: "Goldfinches are not uncommon about here."

21. *Passer domesticus* L.

This species is mentioned in my list for Constantinople, but unfortunately I have almost no notes of Sparrows. I wrote down later, in revising my journal, that I remembered seeing a number of House-Sparrows at the station at Eski-Sheher and also, I thought, at other railway-stations.

22. *Passer hispaniolensis* Temm.

At two different railway-stations in the plateau I identified examples of this bird, the males of which are easily distinguished from the House-Sparrow by the black on the

breast and flanks. These Sparrows were consorting with their town-cousins about the station-buildings, although Dresser (1902 and 1910) says they avoid human habitations.

23. **Fringilla cœlebs* L.

It was very refreshing to hear the cheery song of the Chaffinch one day towards the end of May, bringing thoughts of home to the mind, as I was returning to camp from the higher parts of the Kara Dagh. Two or three of them were in song in a glen at between 5000 and 6000 feet elevation. I saw no others.

24. **Emberiza miliaria* L.

Several Corn-Buntings were heard in and about Scutari in the first half of May. On the journey from Constantinople to Eski-Sheher on May 18 they were "pretty common in the plateau, and were in evidence all the way up, except in the very mountainous parts."

Kara Dagh, June 10: one heard in song at 4300 feet. June 13: several seen and heard a little above 5000 feet (near the great crater).

25. **Emberiza melanocephala* Scop.

The Black-headed Bunting was not uncommon on the slopes above Scutari.

Near Eski-Sheher I saw several at Dorylaion, where the plain for a long distance around was bare of any bush or tree.

In the Kara Dagh they were fairly common from the base up to 5000 feet at least. I found five nests in all. Four eggs appeared to be the full clutch, and these were laid about the last week of May in the case of three nests found about 4000 feet near Maden Sheher, but later (second week of June) in at least one of the two nests found about 1000 feet higher. These birds frequented rough ground with bushes or scrub, and the nests were all built in bushes at a height of from two to five feet. They were formed chiefly of dry grasses, and not very substantially at that.

The song of this bird varied rather markedly in the different districts: those I listened to at Scutari seemed to say "Tit-tit-pretty-pretty-come-along-to-tea-a-ee"; the Kara Dagh birds were not so thoughtful for the comfort of their better halves and sang a shorter song.

26. **Emberiza hortulana* L.

Fairly common on stony, bushy hill-sides above Scutari, also in similar localities in the Kara Dagh.

27. **Alauda arborea* L.

One or two pairs of Wood-Larks were seen in the Kara Dagh at about 4900 feet in broken country with patches of oak-scrub.

28. **Melanocorypha bimaculata* Ménétr. (?)

In the Kara Dagh, Calandra Larks were fairly common. I have identified them with the eastern species, *M. bimaculata*, from the fact that the black corselet in such specimens as I was able to observe appeared to be continuous across the chest. The locality is rather to the westward of the breeding-range indicated by Dresser (1910, p. 324) for the species ("Transcaspia, in Asia through Persia and Afghanistan . . ." etc.), and in the absence of specimens it is as well not to be too confident of identification.

Little seems to be known regarding the nesting-habits of the Eastern Calandra Lark. Dresser (1910) says the only eggs he has seen are those obtained by Zarudny at Kirchjar, Transcaspia.

These Larks I found in the Kara Dagh, frequenting the open parts up to at least 6000 feet. Calandra Larks were also seen in some other districts in the plains or low hills, but I am unable to say whether they were *M. calandra* or *M. bimaculata*.

I found one of their nests in the Kara Dagh on May 24, built under the shelter of a tuft of green herbage on a dry gravelly slope, not far from the Keklik's (Partridge's) nest mentioned below. It was rather deep, constructed of dry grass etc., and when first found was empty. Four days

later it contained two eggs; these the birds subsequently deserted, and I took them. One of them measures 25.2×18.5 mm. In colour they are nearly white, closely freckled all over with dull brown, and with underlying paler spots of yellowish brown and blue-grey.

The singing of *M. bimaculata* is said to be similar to that of *M. calandra* (Dresser, 1910, p. 324), which bird is described as "springing from the ground and with a graceful undulating motion describing a series of large circles until it rises to an immense height" (Dresser, 1881, p. 369, quoting letter from Mr. G. F. Mathew). Another observer (von der Mühle) states that it never soars so high as *Alauda arvensis* (*l. c.* p. 369). Other writers do not mention the spiral soaring.

The Calandra Larks in the Kara Dagħ and elsewhere did not go in for spiral soaring—not they. They had a loud and not unpleasant song, which they uttered while hovering, usually not at a great height, above the ground. The song was not continuous; the bird paused after every few phrases, as though the singer had to stop to think between, and it lacked most of the pleasant imitiveness that lends so much charm to the Skylark's song—a repetition of short warbling strains, with few clear notes.

29. *Sturnus unicolor* Temm.

So far as I am able to say, this was the only species of *Sturnus* I met with in the plateau of Asia Minor. Starlings were pretty common about many of the towns and villages in the plateau. At Eski-Sheher (May 19), and again at Bardatchi (July 6), I watched Starlings at short range with a powerful glass, and on these two occasions certainly they were the black unspotted *S. unicolor*.

There were no Starlings in the Kara Dagħ. At Kilit-Oglu on July 1 there were a good many Starlings, which I entered in my journal at the time as "probably *S. unicolor*."

Dresser (1910) does not state that this Starling nests anywhere to the eastward of Sicily and Sardinia, but quotes

Canon Tristram's authority that it visits the plain of Sharon in Palestine in winter, from which one might expect that it would be found in summer somewhere to the north of that locality.

30. **Pastor roseus* L.

A party of fifteen Rose-coloured Starlings was seen at Dorylaion, near Eski-Sheher, on May 19.

In the Kara Dagh, flocks up to 300 in number passed our camp on several occasions about the end of May, but, although they appeared to follow a definite route, I never discovered whence they came or whither they went.

31. **Garrulus glandarius* L., ? subsp. *krynickii* Kal.

On May 26th I saw three Jays in the oak-woods on the heights of the Kara Dagh (about 6000–7000 feet).

One was also seen near Scutari in May.

32. **Pica rustica* Scop.

At Eski-Sheher, on May 19, I found four Magpies' nests, all of which contained young birds. These were all situated within a small area of cultivated ground (market-gardens) interspersed with rows of trees, near the Hodja Su, just outside the town. At the same spot several other nests were observed.

In the Kara Dagh, Magpies were not uncommon. I found one nest with seven partly incubated eggs on May 25 at about 4000 feet, near Maden-Sheher. Several disused nests were also seen in various parts, and in the great crater I saw one day among the trees, beside the *yaila*, several Magpies and at least one of their nests. On two occasions also, about the end of May, fledglings were brought into camp by peasants.

33. *Corvus monedula* L.

Several Jackdaws were seen at Scutari, and also at Sedja-ed-Din. The grey patch on the hind neck was noticeably whiter than in our British Jackdaws.

[34. *Corvus cornix* L.

Hooded Crows were common in Constantinople, where they nested in the cypress trees.]

35. *Cypselus apus* L.

On the plateau this Swift was very common in the towns. At Konia, in the end of June, great numbers used to fly screaming overhead in the evenings. Common in Constantinople.

36. **Cypselus melba* L.

This species was common about the old walls of Stambul and near other tall buildings in Constantinople. On June 6 I saw one near the camp at Maden-Sheher. This was the only one seen on the plateau.

37. *Coracias garrulus* L.

Seen commonly from the train during the second half of the journey from Eski-Sheher to Konia on May 20, in parts of the plain where there were groves of low trees etc.

38. **Merops* sp. (? *M. apiaster* L.)

Several Bee-eaters frequented a certain locality in the Kara Dagħ (a small glen at the back of the Göz Dagħ). In a small sand-bank I found several deep holes like those of Sand-Martins, which I thought were possibly nesting-places of the Bee-eaters.

39. *Upupa epops* L.

One Hoopoe was seen behind an old *khan* at the base of the Bos Dagħ, May 22. Several others were noticed at villages in the Konia district.

40. **Cuculus canorus* L.

Fairly common in the Kara Dagħ in suitable localities, but apparently it did not come very low down (below 4000 feet?).

I am rather of the opinion that I saw and heard a Great Spotted Cuckoo (*Coccyzus glandarius* L.) in the Kara Dagħ.

41. **Athene noctua* Scop.

The Little Owl, the only Owl I saw, appeared to be pretty well distributed in Asia Minor. I have notes of it from Scutari, the railway between Eski-Sheher and Konia, Bos Dagh, Kara Dagh, and Eski-Sheher district. It was often seen out in broad daylight, but one which I caught in an underground passage beside Bos Dagh seemed dazed on being brought into the sun, and did not struggle at all.

42. **Gyps fulvus* Gmel.

Half-a-dozen of these Vultures were sometimes seen at one time near Maden-Sheher in the Kara Dagh, and one day I had an opportunity of examining a bird which had been shot by a villager. Other Vultures seen at carcasses in the plains in the Konia district were, I think, also Griffons.

43. **Neophron percnopterus* L.

Several seen near Scutari, one seen near Konia.

In the Kara Dagh two or three pairs of Egyptian Vultures nested on Göz Dagh. High up on the face of the cliff of the great pit on Göz Dagh, several little circular chambers with rectangular window-like entrances had been carved out of the living rock by the hand of man in past ages, and these now formed the Vultures' nurseries. One of them was reached without difficulty by a series of narrow ledges, and in it I found two eggs, one of which was empty with a big gash in the side. The other I took, but found it considerably incubated (May 28). It is an unusually long specimen, measuring 75×52 mm. The nest was formed of a few sticks, garnished with wool and odds and ends of various character. The floor of the chamber was thickly strewn with tortoise-shells, few of which were above three or four inches in length. The majority were unbroken. Tortoises are very common in the Kara Dagh.

[44. *Buteo vulgaris* Leach, subsp.

One or two seen near Scutari, May 13.]

Eagles of one or more species were seen not infrequently in the Kara Dagh. I was unable to identify these, but on

May 26 I found an apparently deserted nest with two eggs, which I believe was probably that of the White-tailed Eagle, *Haliaëtus albicilla* L., a bird which Selous found to be common in Asia Minor ('British Birds,' Aug. 1907).

The eggs were white, and one measured 70×55 mm.

The nest was a huge mass of sticks, four feet deep by six in diameter, placed right upon the top of a twenty-foot oak tree among the woods which clothed the slopes of Mahalitch Dagh.

45. **Milvus ictinus* Sav.

Very common in Constantinople, especially at the old walls of Stambul, where they fairly swarm.

Kites were also common near towns and villages in the plateau, and on May 26 I found an empty nest belonging to a pair in the Kara Dagh.

On May 11 and 12 those at Constantinople were laying. On the 19th a nest at Eski-Sheher had fresh eggs, and on the 22nd a nest in the garden at H.B.M. Vice-Consulate at Konia had two eggs and a chick. The young in this same nest were full-fledged on June 30, but had not flown.

46. **Falco cenchris* Naum.

The Lesser Kestrel was very common in the plateau, but was not seen elsewhere. A number frequented the ruins near Maden-Sheher in the Kara Dagh, and in many other districts they were numerous. A good many nest on the ruined Zazadin Khan near Konia, where they had begun to lay on May 22. One of the two eggs found there was lying in contact with a Rock-Pigeon's. On July 7 several pairs were feeding young in the nest, chiefly with mice, at Seja-ed-Din; these nests were built in holes in mosques and houses—one pair had a nest in a hole only five or six feet from the ground at a corner where passers-by were frequent.

Next day young birds were seen hunting "on their own" in the open country, a favourite perch being the telegraph-wire.

[47. *Phalacrocorax carbo* L.

One seen on a breakwater in the Bosphorus.]

48. *Ardea cinerea* L.

A colony of about 20 pairs nested on one large tree near the river at Eski-Sheher. The young were apparently mostly out of the egg by May 19, judging by the numbers of shells strewn below.

49. *Ciconia alba* Bechst.

Very common in the plateau in some districts, especially near Eski-Sheher and between that place and Konia, where "great flocks" were observed on May 20. We passed, too, on that day great numbers of corpses scattered in ones and twos beside the railway-line. I have since heard, on the authority of Mr. Edwin Whittall, of Constantinople, that the Storks on their arrival in 1907 were unable to find sufficient food, owing to the snow, which persisted much later than usual. Great numbers perished, and next year—a normal season—they were several weeks later than usual in arriving.

At Kumbet, on July 7, two or three nests with well-grown young were seen, built on platforms specially erected on the house-tops for the encouragement of these Storks, which are supposed to bring luck with them.

50. *Ciconia nigra* L.

One was seen on July 6 "in a cultivated valley with some trees and a stream, some miles south-east of Saidi-Ghazi."

51. *Tadorna casarca* L.

One, a drake, was seen on a small reedy pond at Kumbet on July 7.

52. **Columba livia* Bonn.

Some of these birds nested at Zazadin Khan, where on May 22 I found two eggs and two well-grown young birds in the same nest; one other egg was also seen.

In the Kara Dagh a colony of more than a score nested in the cliffs on Göz Dagh.

53. **Turtur* sp.

Turtle-Doves were pretty common in the Kara Dagh among the oak-scrub. On June 13 I found a nest with two young a few days old.

In cultivated land near Kumbet I saw eight or ten Turtle-Doves on July 7.

I am unable to say with certainty to which of the three species breeding in Asia Minor (*T. communis*, *T. senegalensis*, and *T. cambayensis*) these birds belonged, although I put them down at the time as *T. communis*.

54. *Pterocles arenarius* Pall.

I shot a Sandgrouse of this species in the plains near the Kara Dagh. It was one of a party of six or eight. In this district similar small parties were not uncommon.

Three hard-set eggs of a Sandgrouse were brought to me from the plains on June the 12th, and another, nearly fresh, about the 23rd.

55. **Caccabis chukar* Gray.

Common all over the Kara Dagh. They are very wary, owing to the persecutions of the villagers, who stalk them persistently with their old guns, even in the nesting season. The males (?) have a habit of sitting on guard on a prominent rock, where they cluck away to their mates in the bushes—hence the Turkish name “keklik.”

I found two nests with fresh eggs near the end of May, one built under a bush, the other in a tuft of green herbage on an open gravelly slope. Other fresh eggs were brought to me later, during June.

56. *Vanellus vulgaris* Bechst.

Between Eski-Sheher and Konia several parties of Lapwings of a few pairs each, were seen from the train on May 20, in marshy districts.

57. *Himantopus candidus* Bonnat.

On May 23 a pair were seen by a sluggish stream in a marshy part of the plain between Konia and the Kara Dagh; “from their behaviour, they did not seem to have eggs or young.”

[58. *Hydrochelidon hybrida* Pall.

This and other species of Terns and Gulls were seen on the Bosphorus in May.]

[59. *Puffinus yelkouanus* Acerbi.

Flocks of these "Lost Souls" or *Yelkovan* were to be seen constantly passing up or down the Bosphorus. The people of Constantinople commonly suppose that they never alight on the water.]

60. ? *Podiceps fluviatilis* Tunstall.

"Plenty of small Grebes" were seen on the pond at Kumbet, July 7.

XXI. *Notes from Mesopotamia.*

By Capt. R. MEINERTZHAGEN, M.B.O.U.

(Text-figure 7.)

A FEW notes on the birds observed during a trip up the Tigris in January, 1914, may be of interest to readers of 'The Ibis.'

Though the list of birds which were seen must not in any way be considered exhaustive, it will give any future traveller in these regions an idea of what he may expect to find in Mesopotamia during the winter months.

Entering the Shat-el-Arab at Fao, I travelled up by river-boat to Bagdad, whence a visit was paid to Babylon and Kerbela. Mosul was visited by carriage, and the return journey to Bagdad made by raft, and thence by river-boat to Basra and Mohammerah.

Though the trip was of short duration, I had exceptional opportunities for observing bird-life both in the desert and on the river.

A fact which was noticed at the start was the European character of the birds seen, scarcely any being purely Asiatic. Again, nearly all birds seen were migrants from the north. The Tigris at Mosul is about 200 yards wide, with frequent sandy islands. In places the river broadens out to half a mile, with marshes on either side, whilst about Tekrit the river passes through low hills, which confine it to a rapid